



## Discussion

In their respective comments, STG Media and TVR agree on the standard and criteria for determining whether to remove WPZM from Tullahoma and reallocate the station to Madison. STG Media and TVR agree that the FCC should consider the proposed reallocation under priority 4 of the FM allotment priorities, public interest matters. STG Media and TVR further agree that any comparison of the two communities must take into account several factors, including the number of aural services received in the proposed service area, the number of local services, and other matters such as the relative size of the proposed community and their growth rate.<sup>2</sup> STG Media and TVR disagree on the weight to be given these factors in selecting between the two communities.

In its Comments, STG Media demonstrated why the reallocation of Station WPZM from Tullahoma to Madison does not qualify as a preferential arrangement of allotments under the FM allotment priorities. STG Media showed the numerous public interest factors that favored keeping WPZM in Tullahoma. First, both Madison and Tullahoma already have a first local service in the form of a daytime AM station. Second, the removal of Station WPZM from Tullahoma would deprive Tullahoma of its sole local nighttime service with no commiserate benefit to Madison, which already has significant local nighttime service. Third, no gain in area or population would occur because TVR does not propose to change the station's transmitter site. Fourth, Station WPZM already provides service to Madison and will continue to do so even without a change in the station's community of license. Fifth, Station WPZM does not provide any specialized service to Madison that would be impaired by

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<sup>2</sup> See *Faribault, Blooming Prairie, Northfield and New Prague, Minnesota*, 7 FCC Rcd 3937 (Chief, Pol. and Rules Div. 1992).

retaining Station WPZM in Tullahoma. Sixth, Madison is part of an urbanized area (Huntsville, Alabama) whereas Tullahoma is not part of any urbanized area.

Seventh, Madison receives significantly more radio services than Tullahoma. Madison receives service from at least 31 radio stations,<sup>3</sup> whereas Tullahoma receives service from only 10 radio stations.<sup>4</sup> A comparison of the number of aural services for the two communities shows that Madison receives three times as many aural services as Tullahoma. There is a radio station for every 935 persons living in Madison whereas Tullahoma only has a radio station for every 1,458 persons in its community.<sup>5</sup> When these seven factors are considered together, it is readily apparent that Tullahoma is more deserving of retaining WPZM as its first local FM service than removing WPZM to Madison.

TVR's Comments identify only one potential benefit to removing WPZM from Tullahoma. TVR claims that Madison has grown significantly since the 1990 census and is now a larger community than Tullahoma. TVR argues that comparison of the population of the two communities is the only difference between the two communities and that therefore this factor is of decisional significance. However, STG Media's Comments show that there are considerable differences between the two communities that the Commission must consider. For example, TVR's Comments did not compare the number of aural services each community receives, instead only analyzing the number of aural services that Tullahoma receives. The sole public interest benefit of population, when weighed with the numerous public interest factors in

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<sup>3</sup> See *Engineering Statement of R. Stuart Graham* at 3 ("*Graham Statement*"), attached hereto as Exhibit 1. The *Graham Statement* used a conservative approach in calculating the number of AM stations that serve Madison, using the 5.0 mV/m contour for AM stations instead of the 2.0 mV/m contour. It is highly likely that more stations serve Madison.

<sup>4</sup> TVR incorrectly asserts that Tullahoma receives service from 14 radio stations. Two of these stations should not be considered because the FM Translators stations and construction permits are mutually exclusive.

support of retaining WPZM as the first local FM service for Tullahoma, does not justify removing WPZM from Tullahoma.

The Commission previously has rejected the removal of a first local nighttime service from its community of license to a new community, even if the new community is larger.<sup>6</sup> Although TVR's Comments cite several cases where the Commission granted a request to change community of license based upon area and population, those cases involved a change in the transmitter site. In those cases, the Commission compared the gain in area and population between the present and proposed transmitter site in determining whether the public interest would be served by the proposed change in community of license and not the size of the communities. Since TVR does not propose to change its transmitter site in this matter, no comparison of area and population is necessary.<sup>7</sup> Instead, the Commission will consider several factors in addition to population in reaching a determination under the fourth priority.<sup>8</sup> Accordingly, to the extent TVR relies upon those cases for the proposition that population is of decisional significance, that reliance is incorrect.

There is another reason separate from the public interest determination that exists for denying TVR's petition. STG Media showed in its Comments that TVR's rule making petition was defective because it did not comply with Section 73.315(b) of the FCC's Rules. Section

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<sup>5</sup> STG Media is relying the numbers TVR provided in its Comments for the population in the communities of Madison (29,000) and Tullahoma (17,506). *See TVR Comments dated May 30, 2000* at 3.

<sup>6</sup> *See, e.g., Bay Springs, Ellisville and Sandersville, North Carolina*, 14 FCC Rcd 21339 (Chief, Alloc. Br. 1999) (FCC policy generally prohibits FM stations from changing community of license leaving daytime only station in their former communities unless the proposed reallocation would result in the provision of a first local transmission service to the new community).

<sup>7</sup> TVR's Comments are mistaken that the lack of change in transmitter site prevents the Commission from denying its rule making petition. As STG Media discussed in its Comments, the Commission denied a petition for rule making similar to this case where the proponent did not propose a change in transmitter site. *See Bronson and Cross City, Florida*, 10 FCC Rcd 8102 (Chief, Alloc. Br. 1995).

73.315(b) requires that a licensee select a transmitter site from which line-of-sight can be obtained from the antenna over the community of license. The rule prohibits any major obstructions in the line-of-site between the transmitter and Madison. STG Media showed in its Comments that there are at least two major obstructions between the transmitter site and Madison that prevent Station WPZM from providing line-of-site coverage over Madison. STG Media's Comments included a technical statement from its consulting engineer demonstrating why the petition did not comply with Section 73.315(b).

STG Media hereby submits technical information from its consulting engineer in further support and clarification that TVR's petition does not comply with Section 73.315(b). The technical statement shows that three mountains block the line of site between the WPZM transmitter and Madison. The technical statement further shows that even when alternative engineering measurement techniques are considered, TVR can not provide the required line-of-site coverage over Madison.<sup>9</sup> The Commission should deny the petition for failing to comply with Section 73.315(b).

### **Conclusion**

The Commission should deny TVR's petition for rule making because it does not represent a preferential arrangement of allotments under the FM allotment priorities. A consideration of the public interest criteria in this matter overwhelmingly supports retention of Station WPZM at its present community, Tullahoma. TVR's rule making petition is defective

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<sup>8</sup> See, e.g., *Jefferson City, Cumberland Gap, Elizabethton, Tennessee, and Jonesville, Virginia*, 13 FCC Rcd 2303 (Chief, Pol. and Rules Div. 1998) (comparative analysis under priority four not limited to merely comparing respective populations of communities).

because it did not take into consideration several mountains located between the transmitter site and Madison. The mountains prevent Station WPZM from providing the required line-of-site service to Madison mandated by Section 73.315(b). Accordingly, the FCC should deny TVR's rule making petition.

**WHEREFORE**, for the foregoing reasons, STG Media, LLC hereby requests that the Commission dismiss TVR's rule making petition.

Respectfully submitted,

**STG MEDIA, LLC**

  
\_\_\_\_\_  
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Washington, DC 20554  
(202) 296-2007

June 14, 2000

Its Attorneys

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<sup>9</sup> Indeed, the *Graham Statement* raises questions as to whether TVR can provide the required city-grade signal over Madison as required by Section 73.315(b) of the Commission's Rules.

# GRAHAM BROCK, INC.

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BROADCAST TECHNICAL CONSULTANTS

**REPLY COMMENTS**  
**MM DOCKET #00-64**  
**STG MEDIA, LLC**  
**TULLAHOMA, TENNESSEE**  
**June 2000**

**TECHNICAL EXHIBIT**

*Copyright 2000*

**REPLY COMMENTS**  
**MM DOCKET #00-64**  
**STG MEDIA, LLC**  
**TULLAHOMA, TENNESSEE**  
**June 2000**

This Technical Statement and attached exhibits were prepared on behalf of STG Media, LLC, licensee of WAHR, Channel 256C, Huntsville, Alabama ("STG"), and are submitted in response to the comments of Tennessee Valley Radio, Inc. ("TVRI"), licensee of WPZM, Channel 227C1, Tullahoma, Tennessee. TVRI is requesting a change in the community of license of WPZM from Tullahoma, Tennessee, to Madison, Alabama.

**BACKGROUND**

TVRI does not propose changes in the present transmitter site for WPZM to implement the requested change in community. TVRI claims that, by using the actual terrain conditions, in the 3 to 16 kilometer sector towards Madison, the 70 dBu contour extends beyond the boundaries of Madison, thus providing the requisite coverage to the community from the licensed WPZM transmitter site. In addition to the restrictions on the channel, TVRI indicates there is no other site for the allocation of Channel 227C1, other than its presently licensed site.

**DISCUSSION**

As previously submitted by STG, the terrain in the 3 to 16 kilometer sector from the WPZM site toward Madison shows rolling terrain from 235 meters to 270 meters. However, at a distance of 31 kilometers from the site, the terrain rises to 435 meters, dropping off to 350 meters at 34 kilometers before dropping back to rolling terrain at 37 kilometers. Attached as Exhibit #1 is a detailed graphic analysis of the line-of-sight from the licensed WPZM antenna to the city center of Madison, Alabama (geographic coordinates North Latitude 34° 41' 57" and West Longitude 86° 44' 54"). It is evident that there are three major terrain obstructions which

significantly attenuate (block) the signal strength of WPZM into Madison.<sup>1</sup> TVRI's initial engineering narrative indicates there are no major terrain obstructions in the path<sup>2</sup>, however, this is clearly not the case.<sup>3</sup> In Woodstock, Virginia, as referenced by TVRI, while the community was further than the typical distance to the city grade contour for the reference class, the actual terrain conditions allowed the Petitioner to show compliance with the coverage requirements of the city (100% coverage). There were no terrain obstructions in the path. This distinguished the instant request from the Woodstock, Virginia, proposal. As a result, the TVRI proposal fails to provide coverage to 100% of Madison from its proposed allocation site.

If TVRI were to use alternate propagation methods in an attempt to demonstrate compliance, which are acceptable in the application process, they would show less than 80% coverage of the community. Using two alternative methods, Longley Rice line-of-sight methodology and FCC point-to-point methodology, each shows substantial attenuation of the signal of WPZM into the community of Madison.

Exhibit #2A, a Longley Rice projection, shows less than 80% of the community would receive a city grade signal from WPZM. Exhibit #2B is a more detailed map of the boundaries of Madison, Alabama, which details that a significant portion of the area defined in the 1990 census, as Madison is not served by a 70 dBu signal. In fact, using this alternate method, there are portions of the community that are served by less than a 60 dBu (1.0 mV/m) contour. In addition, using the proposed Commission's point-to-point methodology, as detailed on Exhibit

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- 1) §73.315 FM transmitter location. ...*(b) ...The location of the antenna should be so chosen that line-of-sight can be obtained from the antenna over the principal city or cities to be served; in no event should there be a major obstruction in this path.*
  - 2) May 28, 1997, Engineering Narrative at Paragraph B.
  - 3) Wade Mountain, Drake Mountain and Rainbow Mountain, as previously detailed in Comments by STG Media, LLC, of May 30, 2000.

#3A, even less of Madison is serviced by the 70 dBu contour. Exhibit #3B, a more detailed map of the community, shows that a significant portion of the area defined in the 1990 Census as Madison is served by less than a 70 dBu contour. TVRI has not even submitted the necessary supporting documentation to demonstrate that it should be allowed to use a supplemental city grade analysis demonstration.

TVRI has also submitted data regarding the number of available aural services in the Tullahoma, Tennessee, area, indicating twelve aural services are being supplied to the community. Attached as Exhibit #4 is a map denoting least thirty-one services being delivered to Madison, Alabama. Attached as Exhibit #4A is a listing of stations providing service to Madison, Alabama.<sup>4</sup>

### **CONCLUSION**

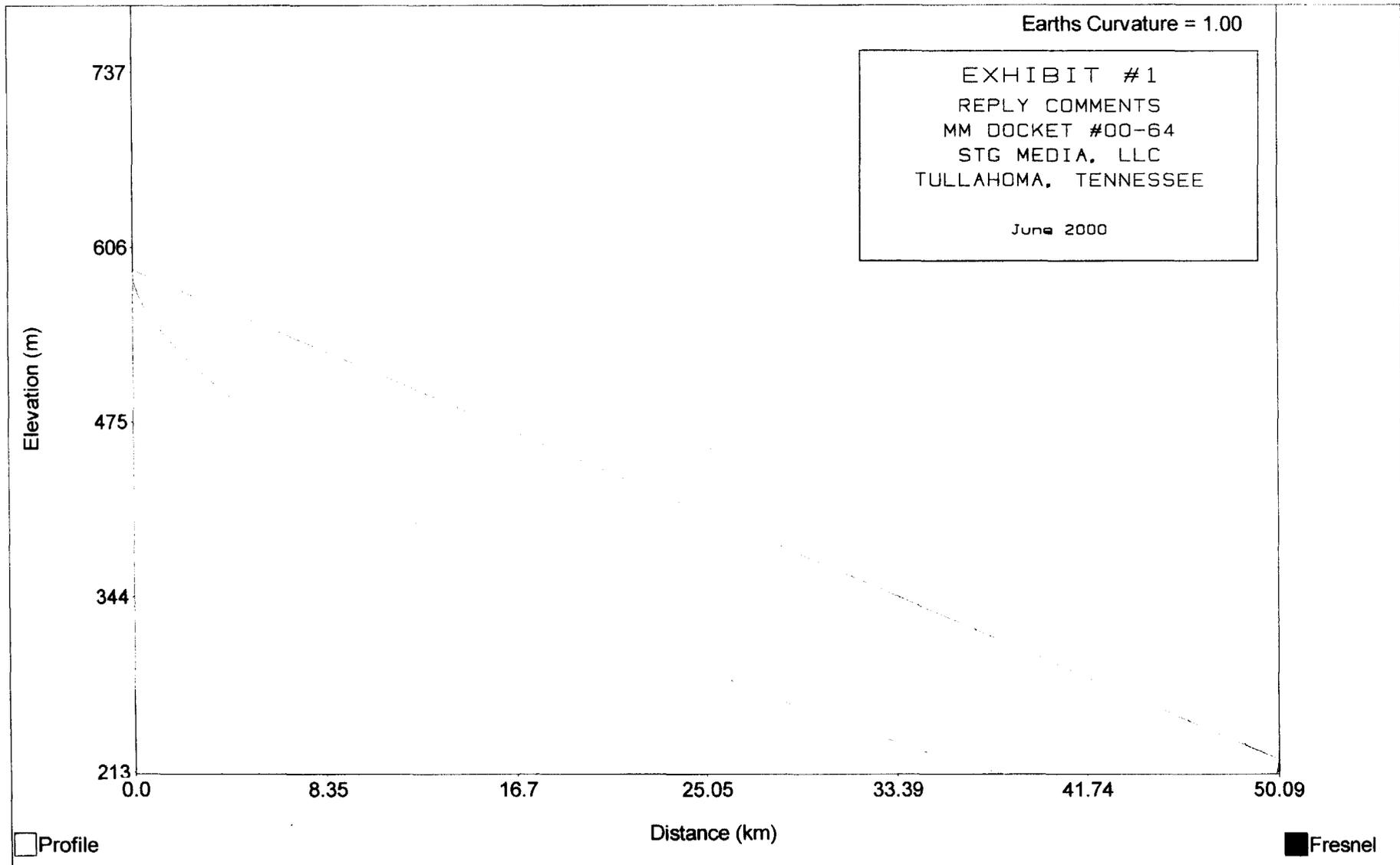
TVRI's proposal clearly does not provide the requisite 70 dBu coverage of Madison, Alabama, from its proposed allocation site as required in a Petition for Rule Making. TVRI has also stated that no other site exists that would meet the Commission's minimum distance separation requirements. Since there is no existing site which meets the city grade coverage requirements to Madison and complies with minimum distance separation requirements, Channel 227C1 cannot be allotted to Madison, Alabama, and TVRI's request must be denied.

We have tried to be as accurate as possible in the preparation of this report. Should there be any questions concerning the information contained herein, we welcome the opportunity to discuss the matter by phone (912) 638-8028.

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3) The levels of service contours used to determine service to Madison were 5.0 mV/m (city grade) for AM stations and 1.0 mV/m (protected contour) for FM stations. Although it is general practice to consider service by AM stations to communities greater than 2,500 when a signal of 2.0 mV/m or greater is delivered, it was felt the more conservative city grade contour would suffice in this case.

# WPZM - MADISON, AL



Starting Latitude: 35-02-04 N

Starting Longitude: 086-22-52 W

End Latitude: 34-42-00.82 N

End Longitude: 086-44-57.92 W

Distance: 50.09 km

Bearing: 222.35 deg

Transmitter Height (AG) = 315.0 m

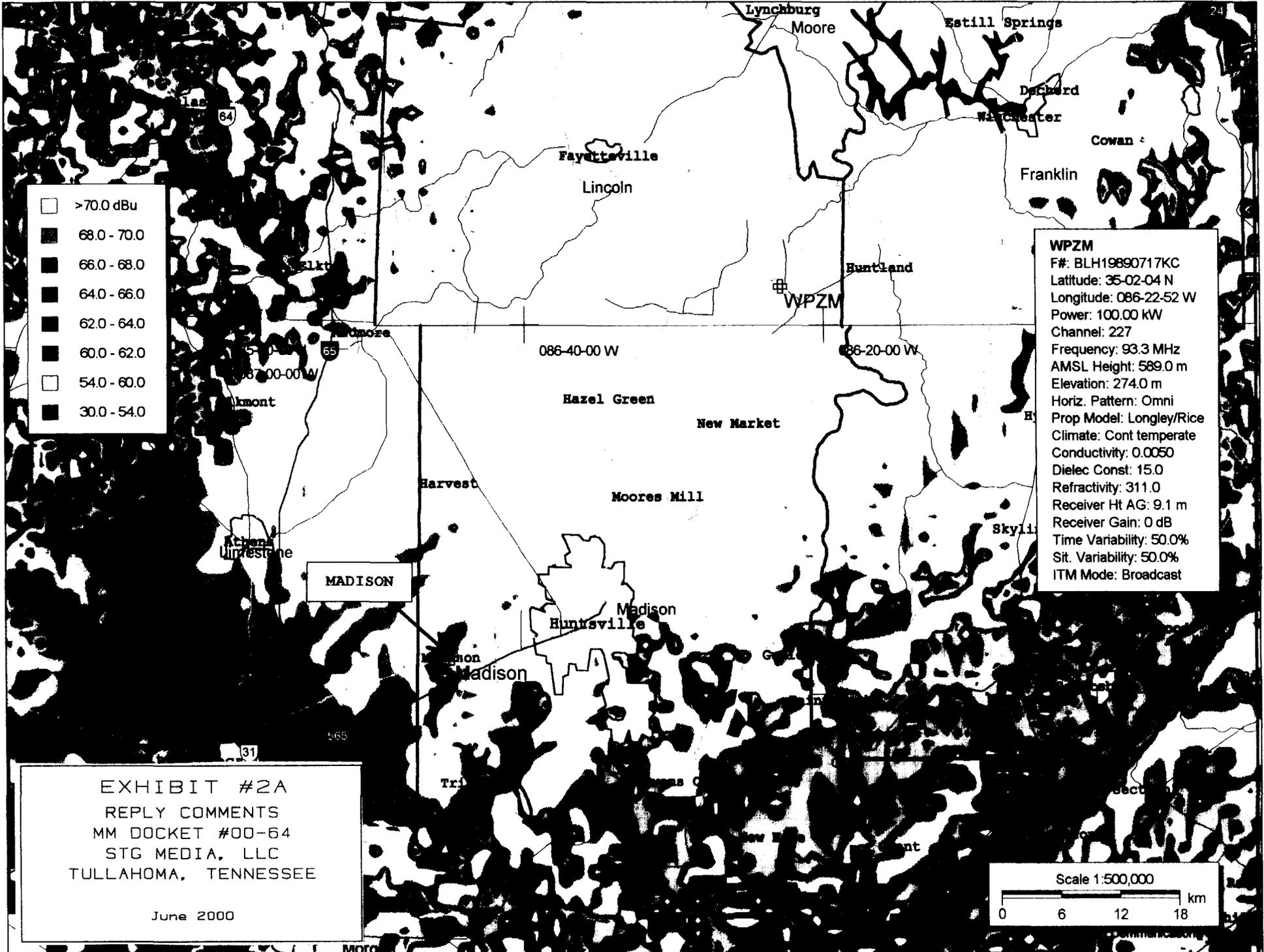
Receiver Height (AG) = 9.1 m

Transmitter Elevation = 274.0 m

Receiver Elevation = 213.1 m

Frequency = 93.3 MHz

Fresnel Zone: 0.6

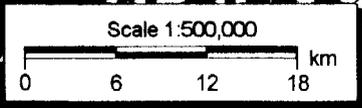


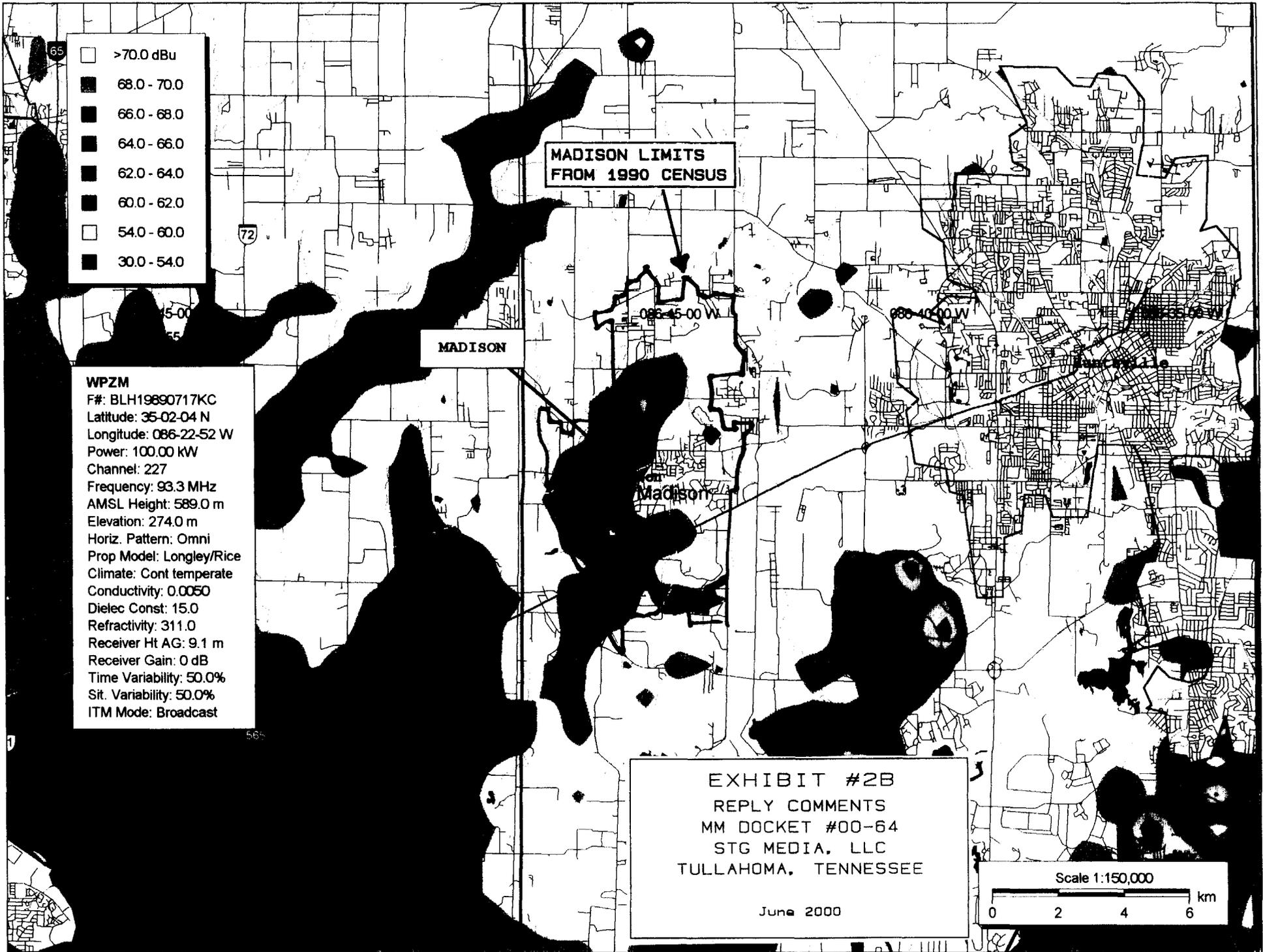
- >70.0 dBu
- 68.0 - 70.0
- 66.0 - 68.0
- 64.0 - 66.0
- 62.0 - 64.0
- 60.0 - 62.0
- 54.0 - 60.0
- 30.0 - 54.0

**WPZM**  
 F#: BLH19890717KC  
 Latitude: 35-02-04 N  
 Longitude: 086-22-52 W  
 Power: 100.00 kW  
 Channel: 227  
 Frequency: 93.3 MHz  
 AMSL Height: 589.0 m  
 Elevation: 274.0 m  
 Horiz. Pattern: Omni  
 Prop Model: Longley/Rice  
 Climate: Cont temperate  
 Conductivity: 0.0050  
 Dielec Const: 15.0  
 Refractivity: 311.0  
 Receiver Ht AG: 9.1 m  
 Receiver Gain: 0 dB  
 Time Variability: 50.0%  
 Sit. Variability: 50.0%  
 ITM Mode: Broadcast

**EXHIBIT #2A**  
 REPLY COMMENTS  
 MM DOCKET #00-64  
 STG MEDIA, LLC  
 TULLAHOMA, TENNESSEE

June 2000





- >70.0 dBu
- 68.0 - 70.0
- 66.0 - 68.0
- 64.0 - 66.0
- 62.0 - 64.0
- 60.0 - 62.0
- 54.0 - 60.0
- 30.0 - 54.0

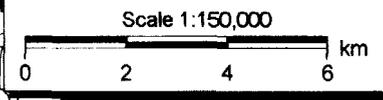
MADISON LIMITS  
FROM 1990 CENSUS

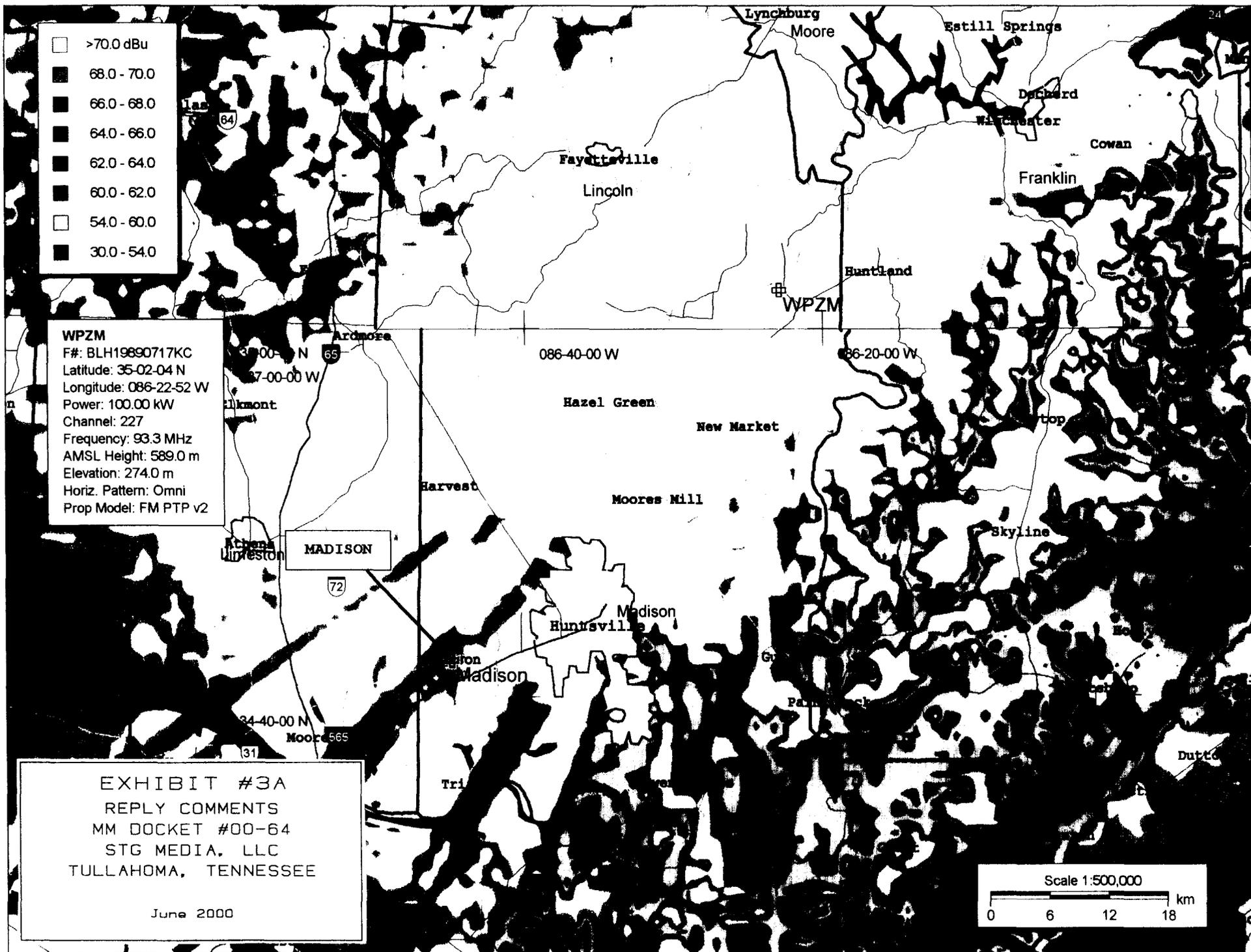
MADISON

**WPZM**  
 F#: BLH19890717KC  
 Latitude: 35-02-04 N  
 Longitude: 086-22-52 W  
 Power: 100.00 kW  
 Channel: 227  
 Frequency: 93.3 MHz  
 AMSL Height: 589.0 m  
 Elevation: 274.0 m  
 Horiz. Pattern: Omni  
 Prop Model: Longley/Rice  
 Climate: Cont temperate  
 Conductivity: 0.0050  
 Dielec Const: 15.0  
 Refractivity: 311.0  
 Receiver Ht AG: 9.1 m  
 Receiver Gain: 0 dB  
 Time Variability: 50.0%  
 Sit. Variability: 50.0%  
 ITM Mode: Broadcast

EXHIBIT #2B  
 REPLY COMMENTS  
 MM DOCKET #00-64  
 STG MEDIA, LLC  
 TULLAHOMA, TENNESSEE

June 2000



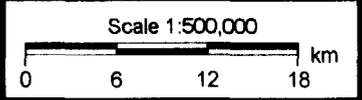


- >70.0 dBu
- 68.0 - 70.0
- 66.0 - 68.0
- 64.0 - 66.0
- 62.0 - 64.0
- 60.0 - 62.0
- 54.0 - 60.0
- 30.0 - 54.0

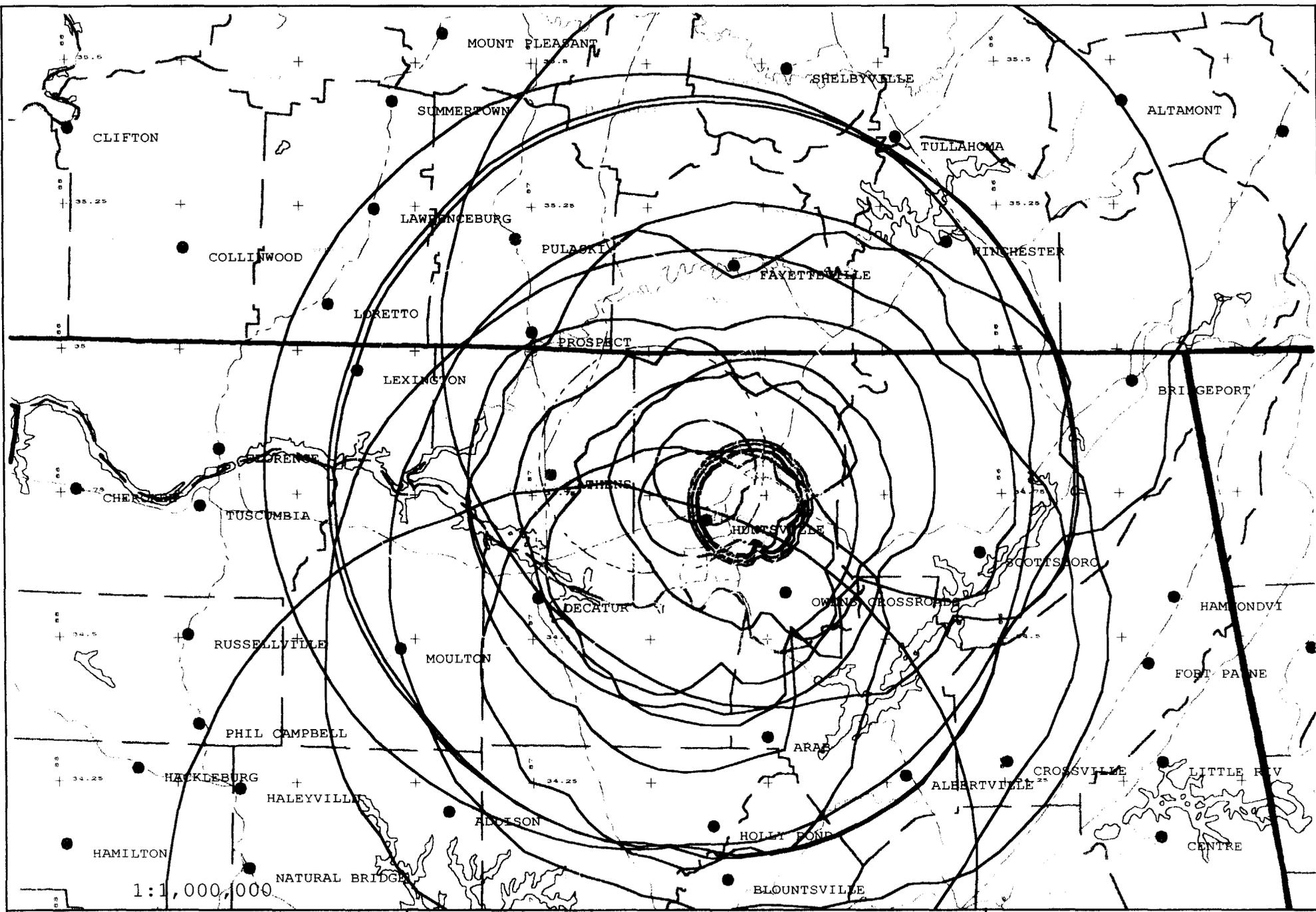
**WPZM**  
 F#: BLH19890717KC  
 Latitude: 35-02-04 N  
 Longitude: 086-22-52 W  
 Power: 100.00 kW  
 Channel: 227  
 Frequency: 93.3 MHz  
 AMSL Height: 589.0 m  
 Elevation: 274.0 m  
 Horiz. Pattern: Omni  
 Prop Model: FM PTP v2

**EXHIBIT #3A**  
 REPLY COMMENTS  
 MM DOCKET #00-64  
 STG MEDIA, LLC  
 TULLAHOMA, TENNESSEE

June 2000

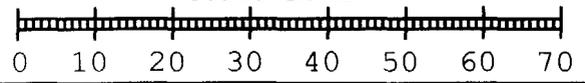






1:1,000,000

Scale in km



SERVICES TO MADISON, ALABAMA

EXHIBIT #4

**REPLY COMMENTS**  
**MM DOCKET #00-64**  
**STG MEDIA, LLC**  
**TULLAHOMA, TENNESSEE**  
**June 2000**

**EXHIBIT #4A**

Stations with contours serving Madison, Alabama  
Reference Coordinates:  
North Latitude: 34° 41' 57"  
West Longitude: 86° 44' 54"

Call    Coordinates    Chan.    Pwr.    City    State    File #

AM Stations 5.0 mV/m

WUMP	344146	864419	0730	1	MADISON	AL	BL851106AH
WVNN	345021	865544	0770	10	ATHENS	AL	BL840423AI
WDJL	344647	863916	1000	10	HUNTSVILLE	AL	
WBXR	345711	863846	1140	15	HAZEL GREEN	AL	BL910705AB
WBHP	344309	863542	1230	1	HUNTSVILLE	AL	BL840926AG
WTKI	344330	863615	1450	1	HUNTSVILLE	AL	BL881020AB
WLOR	345109	863910	1550	50	HUNTSVILLE	AL	BL811120AB
WEUP	344532	863835	1600	5	HUNTSVILLE	AL	
NEW	344532	863835	1700	10	HUNTSVILLE	AL	BP970616AK

FM Stations 1.0 mV/m

Translators:

W201AR	344416	863157	201D	0	Huntsville	AL	BLFT940117TA
W241AA	344736	863751	241D	0	Huntsville	AL	BPFT930806TB
W261CK	344416	863201	289D	0	Huntsville	AL	BPFT930809TD
W264AI	344415	863202	264D	0	Maysville	AL	BLFT960514TC
W275AA	344416	863202	275D	0	Huntsville	AL	BLFT960229TB
W278AA	344905	864416	278D	0.2	Madison	AL	BLFT960523TB
W289AC	344416	863201	289D	0	Huntsville	AL	BLFT921116TA
W293AH	344416	863157	293D	0.1	Normal	AL	BPFT960212TB
W300AH	344416	863202	300D	0	Huntsville	AL	BLFT950718TY

Full Service:

NCEFM							
WLRH	343741	863059	207C1	100	Huntsville	AL	BLED1595
WJAB	344709	863400	215C1	100	Huntsville	AL	BLED910429KA
WYFD	344753	863824	219C2	9	Decatur	AL	BLED951006KA
COMMERCIAL							
WXQW	344416	863157	231A	0.4	Meridianville	AL	BLH950602KC
WNDA	344256	863555	236C2	50	Huntsville	AL	BLH5641
WOCG	344528	863944	211C3	25	Huntsville	AL	BLED780906AO
WRSA	342923	863738	245C	100	Decatur	AL	BLH861028KA
WAHR	344753	863824	256C	100	Huntsville	AL	BLH891219KC
WRRS	340454	865413	266C	100	Cullman	AL	BLH960118KC
WDRM	344736	863751	271C1	100	Decatur	AL	BLH930701KB
WZYP	344905	864416	282C	100	Athens	AL	BLH880510KB
WTAKFM	342745	863836	291C3	5.4	Hartselle	AL	BLH931026KB
WPZM	350204	862252	227C1	100	Tullahoma	TN	BLH890717KC

Number in list= 31

**AFFIDAVIT AND QUALIFICATIONS OF CONSULTANT**

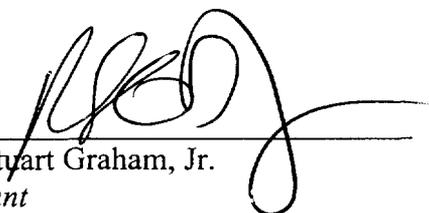
*State of Georgia )*  
*St. Simons Island ) ss:*  
*County of Glynn )*

**R. STUART GRAHAM**, being duly sworn, deposes and says that he is an officer of Graham Brock, Inc. Graham Brock has been engaged by STG Media, LLC, licensee of Radio Station WAHR, to prepare the attached Technical Exhibit.

His qualifications are a matter of record before the Federal Communications Commission. He is a graduate of Auburn University and has been active in Broadcast Engineering since 1972.

The attached report was either prepared by him or under his direction and all material and exhibits attached hereto are believed to be true and correct.

*This the 13th day of June, 2000.*

  
\_\_\_\_\_  
R. Stuart Graham, Jr.  
*Affiant*

*Sworn to and subscribed before me  
this the 13th day of June, 2000.*

  
\_\_\_\_\_  
*Notary Public, State of Georgia  
My Commission Expires: April 20, 2002*

**CERTIFICATE OF SERVICE**

I, LaJuan A. Simmons-Currie, a secretary with the law firm of Rini, Coran & Lancellotta, P.C., do hereby certify that I have caused a copy of the foregoing "REPLY COMMENTS OF STG MEDIA, LLC" to be mailed, first-class, postage prepaid this 14th day of June, 2000 to the following persons:

\*John A. Karousos  
Chief, Allocations Branch  
Federal Communications Commission  
Policy and Rules Division  
Mass Media Bureau  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

\*Sharon P. McDonald  
Federal Communications Commission  
Policy and Rules Division  
Mass Media Bureau  
445 12<sup>th</sup> Street, SW  
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Washington, D.C. 20005  
(Counsel to Tennessee Valley Radio, Inc.)

  
LaJuan A. Simmons-Currie

\* Via Hand Delivery